

WHAT IS CLAIMED IS:

1. A relay device, comprising:

connection detection means for detecting that a client  
terminal which can transmit/receive information through a  
5 network is in a communicable state with the network.

2. The relay device according to claim 1,

wherein the connection detection means acquires  
transmission-related information required to transmit  
information to the client terminal, and

10 the relay device further comprising notification  
transmission means for transmitting results from the  
connection detection means and the acquired  
transmission-related information to an information  
transmission device for transmitting undelivered  
15 information to the client terminal.

3. The relay device according to claim 1, further  
comprising:

information transmission means for transmitting the  
undelivered information to the client terminal, provided  
20 that the connection detection means detects the client  
terminal is in a communicable state with the network.

4. The relay device according to claim 3,

wherein the information transmission means selects  
undelivered information to be transmitted to the client  
25 terminal from information stored in transmission  
information storage means, provided that the connection

detection means detects the client terminal is in a communicable state with the network, and transmits the selected undelivered information to the client terminal.

5           5. The relay device according to claim 4,  
            wherein the information transmission means transmits the selected undelivered information to the client terminal together with other information transmitted to the client terminal.

10           6. The relay device according to claim 5,  
            wherein the other information transmitted to the client terminal is information transmitted/received by use of HTTP; and

15           the information transmission means adds the selected undelivered information by changing the HTTP header of the other information transmitted to the client terminal, and transmits the selected undelivered information to the client terminal.

20           7. The relay device according to claim 4,  
            wherein the information transmission means transmits the selected undelivered information to the client terminal separately from the other information transmitted to the client terminal.

25           8. An information transmission device, comprising:  
            notification reception means for receiving notification concerning detection of a client terminal which can transmit/receive information through a network is in

a communicable state with the network; and

information transmission means for transmitting undelivered information to the client terminal, provided that the notification reception means receives the notification.

9. The information transmission device according to claim 8,

wherein the information transmission means selects undelivered information to be transmitted to the client terminal from information stored in transmission information storage means, provided that the connection detection means detects the client terminal is in a communicable state with the network, and transmits the selected undelivered information to the client terminal.

10. The information transmission device according to claim 8,

wherein the notification reception means receives transmission-related information required to transmit information to the client terminal; and

the information transmission means transmits the undelivered information to the client terminal, provided that the notification reception means receives the transmission-related information.

11. An information transmission method comprising:

a connection detection step of detecting, by use of connection detection means, a client terminal which can

transmit/receive information through a network is in a communicable state with the network; and

an information transmission step of transmitting, by use of information transmission means, undelivered  
5 information to the client terminal, provided that the connection detection means detects the client terminal is in a communicable state with the network.

12. The information transmission method according to claim 11,

10 wherein, in the information transmission step, the information transmission means selects undelivered information to be transmitted to the client terminal from information stored in transmission information storage means, provided that the connection detection means detects  
15 the client terminal is in a communicable state with the network, and transmits the selected undelivered information to the client terminal.

13. The information transmission method according to claim 12,

20 wherein, in the information transmission step, the information transmission means transmits the selected undelivered information to the client terminal together with other information transmitted to the client terminal.

14. The information transmission method according to  
25 claim 13,

wherein, the other information transmitted to the

client terminal is information transmitted/received by use of HTTP, and

in the information transmission step, the information transmission means adds the selected undelivered information by changing the HTTP header of the other information transmitted to the client terminal, and transmits the selected undelivered information to the client terminal.

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10 15. The information transmission method according to claim 12,

wherein, in the information transmission step, the information transmission means transmits the selected undelivered information to the client terminal separately from the other information transmitted to the client terminal.

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16. The information transmission method according to claim 11, further comprising:

an information acquiring step of acquiring, by use of the connection detection means, transmission-related information required to transmit information to the client terminal; and

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an information output step of outputting, by use of the connection detection means, the acquired transmission-related information to the information transmission means.